

**Seismic Events in Alaska:
A Perspective on the
Role of Insurance**

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SEISMIC EVENTS IN ALASKA: THE ROLE OF INSURANCE

This report is limited in scope due to the complexity and volume of information and perspectives on issues related to the role of insurance in responding to a catastrophic seismic event in Alaska. Furthermore, “it is important to understand that insurance alone does not mitigate losses from seismic hazards.”¹

Earthquake insurance should be considered as one facet of a comprehensive solution to help the Alaskan community recover from the financial burden imposed by a catastrophic earthquake event, including secondary losses frequently associated with large earthquakes such as fire, flooding, loss of habitation, and loss of income. To address this dilemma one must examine the availability of insurance in Alaska, what earthquake insurance covers, challenges in the insurance market, mitigation factors, the roll of government, and what steps can be taken to address both current and developing issues and challenges.

Availability of Earthquake Insurance in Alaska

In Alaska there is no form of governmental or other public coverage such as the California Earthquake Authority (CEA), which is a privately funded, publicly managed organization. All earthquake insurance is written by private insurance companies.

According to the latest figures available from the Alaska Division of Insurance (2004) there are fifty-four insurers providing earthquake insurance in Alaska. Of those fifty-four, the top two hold slightly under 59 % of the market share by premium. The next ranking insurer holds just under 11% of the market. Noteworthy, however, is the fact that the number two carrier, with slightly more than 21% of the earthquake insurance market, recently announced that it is withdrawing its optional earthquake coverage nationwide. The “move is part of the property/casualty insurer’s ongoing effort to limit it’s exposure to catastrophic risks, an effort that accelerated after Hurricane Katrina.”² The carrier will cancel current earthquake endorsements as the policies renew, beginning with the fourth quarter of this year. New earthquake coverage from this carrier will no longer be available as of March 2006. This action “will affect nearly 7000 Alaskans who currently have earthquake coverage.”³ Due to the sudden absence of a significant market presence, the remaining insurers in the state will experience increasing pressure to provide earthquake coverage for those losing their current coverage.

¹ Steven Ganz, “Earthquake Insurance: Public Policy Perspectives from the Western United States Earthquake Insurance Summit” (Western States Seismic Policy Council: 1998).
http://www.wsspc.org/Events/1998_Summit/eqiperspectives.html Accessed 16 August 2006.

² BestWire, AM BEST BEST’S news publications & Press Releases March 23, 2006
<http://www3.ambest.com/Frames/FrameServer.asp?AltSrc=23&Tab=1&Site=news&refnum=82478>
Accessed 16 August 2006

³ Melissa Campbell, Alaska Journal of Commerce 08/11/06
http://www.alaskajournal.com/stories/081106/hom_20060811011.shtml Access 17 August 2006

What Earthquake Insurance Covers

Earthquake coverage is an elective coverage in Alaska and is generally provided as an endorsement to an existing building coverage policy or as a separate policy. Standard homeowner, renter, and business insurance policies do not cover damage from earthquakes or flooding resulting from earthquake-generated tsunamis.

Earthquake insurance provides several layers of coverage: 1) damage to the building structure; 2) damage to contents or personal property; 3) loss of use of the structure; and 4) in the case of commercial businesses, loss of business income.

Coverage is triggered by an actual earthquake event that damages a structure as distinguished from the gradual cracking, shifting, or settling of the ground from other causes. The qualifying criteria for a sudden catastrophic event are specifically defined in most policies. Earthquake coverage results from the violent shaking of the earth that can move buildings from their foundations, cause cracking and damage to the structure or contents, trigger landslides, mudflows, avalanches and tsunamis. Vehicles are covered for earthquake damage by the comprehensive insurance portion of an auto policy (again an elective coverage), which also provides coverage for flood or tsunami.

Flood, which is also specifically defined in insurance policies, includes tsunamis, regardless if caused by an earthquake. Flood damage is not covered by typical homeowners, renters, or business policies. The National Flood Insurance Program (NFIP) provides flood coverage and receives support from the Federal Emergency Management Agency (FEMA). Consumers can obtain flood insurance through participating private providers as a “write your own” policy that is administered by NFIP. The federal government underwrites flood insurance and is entirely at risk for the financial exposure to loss. This product is not available to cities or locales that do not participate in the NFIP. The Borough of Kodiak in Alaska, for example, has opted out of NFIP participation and therefore does not have access to this program.

Earthquake insurance is designed for catastrophic events due to the level of peril and significant destruction that an earthquake would cause. Deductibles range from 5% to 20% and apply separately to each portion of coverage. For example, a 10% deductible for a \$100,000 building coverage amount and a \$50,000 contents coverage amount would be as follows: \$10,000 building deductible applied to the total building loss; \$5,000 deductible applied to the total contents loss.

Other consequential damages that result from an earthquake such as fire, water damage from broken pipes, freezing damage, or other damages not specifically excluded under a homeowners or business owner’s policy are covered subject to the policy’s normal deductible. Coverage for loss of use or business income, however, may not apply unless the dwelling is uninhabitable due to a covered loss.

An earthquake policy may include particular exclusions such as, the brick veneer of a frame home. In addition, specific building attributes may make the building uninsurable for the peril of earthquake. These attributes could include wall symmetry, number of stories, significant open areas of exterior walls, geometrically complex building designs, slope or ground stability, and adjacent exposures. All such attributes are underwriting considerations that are evaluated prior to issuing a policy or endorsement. There are often periods where earthquake insurance is unavailable in an area due to a prior earthquake event. Insurance providers normally initiate a short term moratorium on new policies following these events.

Challenges in the Insurance Market

According to Steven Ganz, 1998 Executive Director of Western States Seismic Policy Council there are five areas of challenge facing the insurance market:⁴

1. High Correlation of Claims from a Single Event
2. Low Probability/High Consequence Events
3. Difficulty in Identifying What Losses May Occur
4. Lack of Incentive to Take Preventative Action
5. Adverse Selection

“High Correlation of Claims from a Single Event. Because earthquakes are geographically focused events, when one occurs many claims are concentrated in a single area. Because losses from a single event can be tremendous, insurers are hesitant to offer many policies in an area facing the same hazard.

Low Probability/High Consequence Events. Major earthquakes seldom occur, but when they do, catastrophic consequences follow. Because of the limited number of past events and the difficulty in accurately predicting future events, insurers need to utilize the risk assessments from experts. However, these estimates are highly uncertain and ambiguous. For example, scientists predict that a catastrophic earthquake will be centered in the Pacific Northwest, but they do not know if it will occur next year, or if it will occur in 1,000 years, or which specific communities will be affected.

Difficulty in Identifying What Losses May Occur. Although scientists are able to identify the probabilities of an earthquake occurring for a given location, and they can estimate the magnitude and duration of ground shaking, accurately predicting the damage to any given structure remains difficult. For example, homes abutting each other during an earthquake can sustain substantially different damage. Specific site conditions and

⁴ Five areas and descriptions from Ganz, “Earthquake Insurance: Public Policy Perspectives from the Western United States Earthquake Insurance Summit” (Western States Seismic Policy Council: 1998). <http://www.wsspc.org/Events/1998_Summit/eqiperspectives.html>. Accessed 16 August 2006.

construction standards can cause wide variations. The vast number of variables involved makes it almost impossible and quite expensive to predict losses.

Lack of Incentive to Take Preventative Action. Because hazard insurance reduces the cost of rebuilding after an earthquake, it makes the homeowner feel more secure and less interested in adopting mitigation measures. This helps to explain the lack of voluntary loss prevention measures among the insured. For instance, an owner of a wood-frame home may lose the incentive to bolt the wooden structures to their foundations and apply adequate bracing after an earthquake insurance policy is purchased.

Adverse selection. When the insured possess information unknown to the insurer, high-risk consumers will purchase low-premium policies designed for lower-risk consumers. In the case of earthquake insurance, this information includes structural aspects of a building such as unbolted foundations or unfastened water heaters. To address this issue, insurers set a rate schedule to capture the varying risk among policyholders. However, adverse selection still occurs even when insurers issue different insurance policies targeted at groups with different risk, because they often fail to differentiate the premium schedule wide enough due to regulatory controls or other reasons. Therefore, insurers will still incur losses because the premium differential fails to discourage high-risk consumers from purchasing the low-premium policy designed for low-risk consumers.”

Proposed Solutions

There is no single solution to the problem of mitigating loss from earthquakes. Rather, the solution must be derived from the efforts of the insurance industry, state and local governments, the building industry, realtors, and consumer and labor groups. Public and private entities must partner to develop a broad approach to mitigating the effects of a catastrophic earthquake.

Possible solutions and partnerships include but are not limited to:

- Adopting and enforcing cost effective, universal building codes for new structures as well as rehabilitation of existing structures
- Coordinated disaster planning between insurance companies and local, state and federal governments
- Enactment of properly constructed state catastrophe funds and pools
- Public awareness and participation by Alaskans who prepare and insure themselves as distinguished from sole dependence on government programs
- Provide incentives for mitigation efforts
- Creation of federal natural disaster legislation supporting insurers and re-insurers to help stabilize the market

Should a homeowner or business owner buy earthquake insurance?

The answer varies on an individual basis. For most people, their home or business is the single largest investment they will make during their lives. It makes sense to protect such an investment. Consumers often believe that the government will step in after an earthquake and provide significant financial assistance for personal losses. This is a misconception. The government typically provides disaster aid in the form of low interest loans which will require repayment. Each homeowner and business owner needs to assess their individual risk situation, the options available for each risk, and make informed risk management choices.

Earthquake Insurance and Alaska School Districts

All school districts in Alaska must comply with AS 14.03.150 by maintaining all risk property insurance coverage for the replacement cost of all school facilities and equipment.

This state statute is carried out by the Alaska Administration Code, Section 4 AAC 31.200; 205; 210; 215; 220 & 225.

Section 4 AAC 31.200 states in part that “an insurance policy purchased by a regional educational attendance area for any school facility or equipment owned by the state shall include (1) the state as an additional insured; (2) earthquake coverage; and (3) flood coverage, regardless of whether the school facilities or equipment are in a flood plain or flood-prone area.”

Why Should ASHSC Promote Earthquake Insurance In Alaska?

Clearly Alaska is a region that faces the high probability of a major earthquake event with catastrophic results. As Alaska grows and its population density increases, particularly along known fault lines, the destructive capacity of a catastrophic earthquake increases.

Insurers can provide resources and expertise to help educate Alaskans to take steps toward individual responsibility in mitigating loss from earthquakes. Insurance providers can partner with local, state, and federal governments to enhance the financial incentives for the private sector.

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